

REMARKS

Applicant respectfully requests reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

Claim Status

Claims 1-40, 43, 65-97 were canceled in previous amendments.

Claims 105-106 are added by this amendment. Support for these claims may be found in the Specification, for example at page 11, lines 13-16 and page 11, lines 9-13.

Applicants submit that no new matter has been added by this amendment and hereby request its entry.

Claims 41, 42, 44-64, 98-106 are currently pending.

Amendments to the Title

Pursuant to a request in the Office Action, Applicants have amended the title to be more descriptive. The title now identifies that the methods of the invention employ gamma-tocopherol and metabolites thereof. Applicants submit that no new matter is presented with this amendment and hereby request its entry.

Rejection under Judicially Created Doctrine of Obviousness-type Double Patenting

Claims 41, 42, 44-64, 98-104 currently stand rejected under the judicially created doctrine of obviousness-type double patenting over claims 1-62 of co-pending application USSN: 10/020,450. As the Examiner has noted, Applicants have requested that this rejection be held in abeyance until the claims of one of the applications are deemed in condition for allowance.

Rejection under 35 U.S.C. §112, second paragraph

Claims 41, 44-52, 58-64 and 99 stand rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as their invention. It is the Examiner's contention that "while the presence of a type of tocopherol, i.e., beta, delta or gamma, in the claimed composition is clear, the language of the claims does not preclude other types of tocopherol." *See*, the Office Action, page 3. The Examiner further contends that "claims 41, 44-52, 58-64 and 99 lack clarity in the open language employed permits any other active ingredient including other types of tocopherols." *Id.*

Applicants respectfully traverse this rejection because "those skilled in the art would understand what is claimed when the claim is read in light of the specification." *See*, MPEP § 2713.02 quoting *Orthokinetics, Inc. v. Safety Travel Chairs*, 1 U.S.P.Q.2d 1081, 1088 (Fed. Cir. 1986).

Specifically, independent claim 41 was previously amended to bring out the feature that a "gamma-tocopherol enriched tocopherol composition" refers to tocopherol compositions in which gamma-tocopherol compositions in which gamma-tocopherol comprise at least 50% of the mixture. *See*, the Specification at page 14, lines 1-27; page 20, lines 17-23. Further, the specification teaches that the gamma-tocopherol enriched compositions may include other active ingredients, including other tocopherols. *See*, the Specification at page 15, lines 1-3; page 14, lines 14-15; page 14, lines 21-27; and page 33, lines 19-26. Still further, it is commonplace to employ the claim language of "comprising" to indicate an inclusive, open-ended, unrecited elements. *See*, MPEP §2111.03. In light of the claim language and the teachings in the specification, Applicants submit that claims 41, 44-52, 58-64 and 99 do not lack clarity or precision. As such, Applicants request that this rejection be withdrawn.

Rejection under 35 U.S.C. §102(e)

Claims 41-64 and 98 were rejected in the Office Action mailed April 6, 2004 (Paper No. 033004) under 35 U.S.C. §102(e) over Wechter US 2004/0058986. In order to expedite prosecution of the instant application and in light of the currently pending claims, Applicants apply this rejection to claims 41, 42, 44-64, and 98.

Applicants hereby reiterate their arguments over this rejection that were originally presented together with the Amendment and Reply under 37 C.F.R. §1.111 filed on August 6, 2004.

In order to qualify as a prior art reference under 35 U.S.C. §102(e), the reference patent or patent publication must have a filing date that is earlier than the effective filing date of the application under examination. MPEP 706.02(a). To sustain a rejection under 35 U.S.C. §102(e), the invention must have been described in application for patent by another filed in the U.S. (or in an international patent application designating the U.S. under 35 U.S.C. §351(a)) before the invention by the applicants.

The Claimed Invention

Pending claims 41, 42, 44-64 and 98-104, are directed to methods of treating and/or ameliorating symptoms of a non-cardiovascular tissue ischemic condition by administering a gamma-tocopherol enriched tocopherol composition comprising at least 50% gamma-tocopherol or a naturally occurring metabolite of gamma-tocopherol. Exemplary tissue ischemic conditions are described in detail in the specification. *See, e.g.*, the Specification, page 19, line 1 to page 20, line 2.

Wechter 2004/0058986

Wechter 2004/0058986 was filed on September 12, 2003 and claims priority via a series of continuation applications to December 17, 1998.

The specification of Wechter 2004/0058986 describes the use of gamma-tocopherol, to treat a number of conditions: “high blood pressure, thromboembolic disease, cardiovascular disease, cancer, natriuretic disease, the formation of neuropathological lesions and a reduced immune system response...” (Paragraph [0008]); “producing a natriuretic effect” (Paragraph [0009]); “cardiovascular diseases such as ischemia, angina, edematous conditions, atherosclerosis, LDL-oxidation, adhesion of monocytes to endothelial cells, foam cell formation, fatty-streak development, platelet adherence, platelet aggregation, smooth muscle cell proliferation, and reperfusion injury....treat and prevent cancers such as lung cancer, prostate cancer, breast cancer, and colon cancer” (Paragraph [0011]); “treatment and prevention of natriuretic diseases, such as hypertension, high blood pressure, ischemia, angina pectoris, congestive heart failure, cirrhosis of the liver, nephritic syndrome, ineffective renal perfusion or ineffective glomerular filtration....neurological diseases including hyporeflexia, ophthalmoplegia, and axonal dystrophy... improve a subject’s immune system response, reduce the production of free radicals...” (Paragraph [0012]).

While, as exemplified above, the specification of Wechter 2004/0058986 describes the use of gamma-tocopherol for treating a whole plethora diseases, nowhere in the specification of Wechter 2004/0058986 is the term “non-cardiovascular tissue ischemia” used. Furthermore, none of the diseases listed by Wechter 2004/0058986 appear to fall into the category of diseases that the applicants have defined as “non-cardiovascular tissue ischemia,” or, for that matter, that persons skilled in the art would categorize in such a manner.

For what appears to applicants to be the first time in the string of applications in the patent family that encompasses Wechter 2004/0058986, applicant Wechter introduces the term “non-cardiovascular tissue ischemia” into the claims of the application.

Analysis

1. The claims of Wechter 2004/0058986 are not supported by the disclosure of the specification.

Although Wechter 2004/0058986 claims priority to earlier filed continuation applications, the specification on which Wechter 2004/0058986 is based does not support its claims, as described above. Accordingly, the claims and the subject matter thereof cannot derive benefit of the earlier filing date(s). Thus, since filing date of Wechter 2004/0058986 is later than both the filing date and the priority dates of the applicants' instant application, the subject matter of Wechter 2004/0058986 that the Examiner has cited against the instant claims cannot be said to anticipate the applicants' claimed invention.

2. Rejection under 35 U.S.C. §102(e) is improper.

Furthermore, a rejection under 35 U.S.C. §102(e) is improper if the Examiner believes that the claims of Wechter 2004/0058986 are identical to the claims of the instant application. In such instances, the Examiner must determine whether a double patenting rejection or an interference is appropriate. MPEP 706.02(b). In the current case, there is no support in the specification for the claims as filed in Wechter 2004/0058986.

In view of the foregoing, applicants submit that Wechter 2004/0058986 is not an effective reference against the Applicants' pending claims. Accordingly, withdrawal of the rejection under 35 U.S.C. §102(e) is respectfully requested.

Applicants acknowledge, with thanks, that the Examiner has agreed to obtain all of the Wechter applications for review to assess Applicants' arguments. Applicants look forward to the Examiner's assessment. In the meantime, Applicants maintain the arguments previously presented.

Rejections under 35 U.S.C. §103(a)

Claims 1-64 and 98 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Wechter, W.J. U.S. 2004/0029954 (“Wechter 2004/0029954”). In light of the previous amendment, Applicants apply this rejection to claims 41, 42, 44-64 and 98.

Claims 41, 44-52, 58-64 and 99 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Bilenko, et al. Byulleten’ Eksperimental’noi Biologii i Meditsiny (abstract) (“Bilenko, et al.”).

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. In re Vaeck, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991) (MPEP § 2143).

Now, the individual rejections will be addressed.

A. Wechter, W.J., U.S. 2004/0029954 (“Wechter 2004/0029954”)

Applicants hereby reiterate their arguments over this rejection that were originally presented together with the Amendment and Reply under 37 C.F.R. §1.111 filed on August 6, 2004.

It is the Examiner’s position that the claims of Wechter 2004/0029954 “directed to methods of treating or preventing any ischemic condition...includ[ing] those associated with the liver, the kidney, diabetes, thromboembolytic disease, the brain, the nervous system and the eye”

using gamma-tocopherol or a metabolite (LLU- α) of gamma-tocopherol render obvious the applicants' claimed invention.

The Claimed Invention

Pending claims 41, 42, 44-64 and 98, are directed to methods of treating and/or ameliorating symptoms of a non-cardiovascular tissue ischemic condition by administering a gamma-tocopherol enriched tocopherol composition comprising at least 50% gamma-tocopherol or a naturally occurring metabolite of gamma-tocopherol.

The Cited Reference

Wechter 2004/0029954 was filed on February 21, 2003 and claims priority via a series of continuation applications to December 17, 1998. Except for the claims, applicants submit that the specification of Wechter 2004/0029954 is essentially identical to that of Wechter 2004/0058986, described above. As stated above, while the specification of Wechter 2004/0029954 describes a whole "laundry list" of maladies, it does not describe or support the subject matter of the claims set forth in the application as filed on February 21, 2003, which form the basis for the Examiner's rejection under this section.

Analysis

1. Wechter 2004/0029954 is not an effective reference against the instant application for the subject matter cited by the Examiner.

As stated above, the subject matter of Wechter 2004/0029954 that the Examiner cites against the applicants' claimed invention is not supported by the specification and therefore does not derive the benefit of the earlier filing date(s). Specifically, the filing date of Wechter 2004/0029954 is later than both the filing date and the priority dates of the applicants' instant application, the cited subject matter of Wechter 2004/0029954 cannot be said to render obvious the applicants' claimed invention.

2. Wechter 2004/0029954 does not render obvious the claimed subject matter of the instant application.

The subject matter of the specification of Wechter 2004/0029954 is described in the previous section. To re-iterate, Wechter 2004/0058986 describes the use gamma-tocopherol, to treat a number conditions: “high blood pressure, thromboembolic disease, cardiovascular disease, cancer, natriuretic disease, the formation of neuropathological lesions and a reduced immune system response...” (Paragraph [0008]); “producing a natriuretic effect” (Paragraph [0009]); “cardiovascular diseases such as ischemia, angina, edematous conditions, atherosclerosis, LDL-oxidation, adhesion of monocytes to endothelial cells, foam cell formation, fatty-streak development, platelet adherence, platelet aggregation, smooth muscle cell proliferation, and reperfusion injury....treat and prevent cancers such as lung cancer, prostate cancer, breast cancer, and colon cancer” (Paragraph [0011]); “treatment and prevention of natriuretic diseases, such as hypertension, high blood pressure, ischemia, angina pectoris, congestive heart failure, cirrhosis of the liver, nephritic syndrome, ineffective renal perfusion or ineffective glomerular filtration....neurological diseases including hyporeflexia, ophthalmoplegia, and axonal dystrophy... improve a subject’s immune system response, reduce the production of free radicals...” (Paragraph [0012]).

Analysis

While Wechter 2004/0029954 suggests the use of gamma-tocopherol for a whole plethora of indications, these indications would not fall into the category of non-cardiovascular tissue ischemias. Nor is there anything in the reference that would suggest that its teachings of the treatment of the various enumerated disease states might also be applicable to treating non-cardiovascular tissue ischemias.

Since the reference neither shows nor suggests methods of treating non-cardiovascular ischemia, along the lines of the applicants’ claimed invention, it cannot be said to render obvious

the instant invention. Accordingly, reconsideration and withdrawal of the rejection of the claims over Wechter 2004/0029954 is respectfully requested.

Applicants again acknowledge, with thanks, that the Examiner has agreed to obtain all of the Wechter applications for review to assess Applicants' arguments. Applicants look forward to the Examiner's assessment. In the meantime, Applicants maintain the arguments previously presented.

B. Bilenko, et al. Byulleten' Eksperimental'noi Biologii i Meditsiny (abstract) ("Bilenko, et al.")

Prior to the rejection being addressed on its merits, Applicants first take issue with the finality of this rejection. According to MPEP § 706.07(a), "[u]nder present practice, second or any subsequent actions on the merits shall be final, except where the examiner introduces a new group of rejection that is ... necessitated by Applicants' amendment of the claims..." Applicants submit that the amendment filed on August 6, 2004 did not necessitate this new ground of rejection and hereby request the finality of the rejection be withdrawn.

In a broad sense, the invention, as currently claimed, is directed to a method of reducing cell or tissue death associated with tissue ischemic condition in a mammalian subject, comprising administering a gamma-tocopherol enriched composition comprising at least 50% gamma-tocopherol.

Applicants submit that the Office has failed to meet its burden of established a *prima facie* case of obviousness because Bilenko, et al., provides no motivation or suggestion for one of skill in the art to modify the teaching of Bilenko, et al. to arrive at the compositions of the currently claimed invention. It is well established that the motivation to modify the reference must flow from some teaching in the reference that suggests the desirability or incentive to make the modification needed to arrive at the claimed invention. *Ruiz v. A.B. Chance Co.*, 357 F.3d 1270, 1276 (Fed. Cir. 2004). "The mere fact that the prior art could be so modified would not

have made the modification obvious unless the prior art suggested the desirability of the modification." *In re Laskowski*, 10 U.S.P.Q.2d 1397, 1399 (Fed. Cir. 1989) (quoting *In re Gordon*, 733 F.2d 900, 902, 221 U.S.P.Q. 1125, 1127 (Fed. Cir. 1984)).

Specifically, Bilenko et al., teaches that a combination prophylactic injection of alpha-tocopherol and synthetic antioxidants ionol, diludin and 6-mercuroscan prevented the development of lesions during acute renal ischemia and subsequent reperfusion. There is no teaching or suggestion in Bilenko, et al. that would motivate one of skill in the art to administer a gamma-tocopherol enriched composition comprising 50% gamma-tocopherol to reduce cell or tissue death associated with non-cardiovascular tissue ischemia.

Further, Bilenko, et al. only teaches that the injections of alpha-tocopherol and the synthetic antioxidants were useful in preventing the development of lesions during acute renal ischemia and subsequent reperfusion. There is no suggestion that this treatment would be beneficial for the currently claimed non-cardiovascular tissue ischemic conditions.

The Office Action contends that "[t]ocopherols, other than gamma, are known in the prior art to treat non-cardiovascular ischemic conditions." However, the fact that other tocopherols were simply known to exist at the time does not provide the proper desirability and incentive to modify Bilenko, et al. to use a gamma-tocopherol enriched composition, let alone a gamma-tocopherol enriched composition comprising 50% gamma-tocopherol.

As the Office has failed to meet its burden to establish a *prima facie* of obviousness, Applicants hereby request that this rejection be withdrawn.

Conclusion

Applicant believes that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 50-0872. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 50-0872. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 50-0872.

Respectfully submitted,

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By Lorna L. Tanner

FOLEY & LARDNER LLP
Customer Number: 38706
Telephone: (650) 251-1104
Facsimile: (650) 856-3710

Lorna L. Tanner
Attorney for Applicant
Registration No. 50,782